CLAIMS

I/We claim:

[c1] 1. A method in a network of switches for handling errors, the method comprising:

receiving at a switch a transaction request from an initiator communications device;

transmitting the transaction request through the network to a responding communications device;

receiving at a switch a transaction response from the responding communications device;

transmitting the transaction response through the network to the initiator communications device; and

upon detecting an error during the transmission of the transaction response, terminating the transmission and transmitting an error message to the initiator communications device.

[c2] 2. The method of claim 1 wherein the initiator communications device is responsible for handling the error.

[c3] 3. The method of claim 2 wherein the handling includes re-transmitting the transaction request.

[c4] 4. The method of claim 2 wherein the initiator communications device forwards an indication of the error message to an upper layer for handling.

[c5] 5. The method of claim 4 wherein the upper layer is an application layer.

[c6] 6. The method of claim 1 including:

upon detecting an error during the transmission of the transaction request, terminating the transmission and transmitting an error message to the initiator communications device.

[c7] 7. The method of claim 1 wherein the switches, initiator communications device, and the responding communications device are part of a storage area network.

[c8] 8. The method of claim 1 wherein the responding communications device is a data store device.

[c9] 9. The method of claim 1 including wherein a switch, upon receiving the error message, preempts transmission of a data packet to transmits the error message.

[c10] 10. A method in a switch for handling errors, the method comprising:

detecting an error that occurs during transmission of data;

identifying a communications device that initiated the transmission of the data; and

transmitting an error message to the identified communications device so that the identified communications device can handle the error.

[c11] 11. The method of claim 10 wherein the identifying includes retrieving an address for the communications device that initiated the transmission.

[c12] 12. The method of claim 10 wherein the communications device that transmitted the data to the switch is not notified of the error.

[c13] 13. The method of claim 10 including receiving an error message addressed to an initiator communications device and transmitting the error message to initiator communications device.

[c14] 14. The method of claim 10 wherein the switch is part of a storage area network.

[c15] 15. The method of claim 10 wherein the switch does not have logic for handling error messages.

[c16] 16. The method of claim 10 wherein the error is detected during transmission of a request transmitted from the identified communications device to a responding communications device.

[c17] 17. The method of claim 10 wherein the error is detected during transmission of a response transmitted from a responding communications device to the identified communications device.

[c18] 18. The method of claim 10 wherein the identified communications device handles the error.

[c19] 19. The method of claim 10 wherein the identified communications device initiates the transmission of data by transmitting a request to a responding communications device.

[c20] 20. The method of claim 19 wherein upon receiving the error message, the identified communications device re-initiates the transmission of data by re-transmitting the request to the responding communications device.

[c21] 21. A communications device comprising:

a detection component that detects an error during transmission of data from a transmitting communications device;

a identification component that identifies a communications device that initiated the transmission of the data; and

a transmission component that transmits an error message to the identified communications device rather than reporting the error to the transmitting communications device.

[c22] 22. The communications device of claim 21 wherein identification component identifies the communications device by retrieving an address for the communications device that initiated the transmission.

[c23] 23. The communications device of claim 21 wherein the communications device is a switch.

[c24] 24. The communications device of claim 21 including

a receiving component that receives an error message addressed to an initiator communications device and transmits the error message to initiator communications device without handling the error message.

[c25] 25. The communications device of claim 21 wherein the communications device is part of a storage area network.

[c26] 26. The communications device of claim 21 wherein the communications node is a data store device.

[c27] 27. The communications device of claim 21 wherein the communications device does not have logic for handling errors.

[c28] 28. The communications device of claim 21 wherein the error is detected during transmission of a request transmitted from the identified communications device to a responding communications device.

[c29] 29. The communications device of claim 21 wherein the error is detected during transmission of a response transmitted from a responding communications device to the identified communications device.

[c30] 30. A switch comprising:

means for detecting an error that occurs during transmission of data;

means for identifying a communications device that initiated the transmission of the data; and

means for transmitting an error message to the identified communications device so that the identified communications device can handle the error.

[c31] 31. The switch of claim 30 including wherein the means for identifying includes means for retrieving an address for the communications device that initiated the transmission.

[c32] 32. The switch of claim 30 wherein the means for transmitting does not notify the communications device that transmitted the data to the switch of the error.

[c33] 33. The switch of claim 30 including:

means for receiving an error message addressed to an initiator communications device and transmitting the error message to initiator communications device.